

**REMARKS**

In the Office Action mailed August 20, 2008, the Examiner noted that claims 1-13 were pending, and rejected claims 1-13. Claims 1 and 13 have been amended and claims 1-13 are pending for reconsideration. No new matter has been added. The Examiner's rejections are traversed below.

**Noted - Priority Document Received By USPTO**

The indication (see Office Action Summary, box 12.a.1) that the certified copy(ies) of the priority document(s) has been received by the USPTO is noted with appreciation.

**TRAVERSAL OF REJECTIONS UNDER 35 U.S.C. § 103**

Claims 1-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Choquier et al. (U.S. Patent No. 5,951,694) in view of Goldszmidt et al. (U.S. Patent No. 7,054,943).

Applicant respectfully traverses.

The Office Action admits that Choquier fails to teach the service servers are grouped depending on quality levels of the rendered services and an intermediate service group that operates on low level services at a normal time and shifts to another group during the time of increased activity and returns to the original level after the increased activity period, wherein the service request with a high service level requirement is preferentially processed while still processing service requests of a lower service level requirement.

Goldszmidt recites: "The decision method 600 looks for (e.g., attempts to obtain) potential revenue maximization opportunity when allocating free resources to various customers, ..." (column 6, lines 57-59). However, for example, in claim 1 of the present invention, a step of "reducing a load on a service server within any of the plurality of groups by using at least one service server with the lightest load within the intermediate server group as the service server..." is recited. The service servers of the intermediate server group of present claim 1 are not free resources. Therefore, Goldszmidt does not disclose or suggest the intermediate group service server or steps related to the intermediate service server:

managing the plurality of service servers by dividing the service servers to define a plurality of groups of service servers depending on quality levels of rendered services, and an

intermediate server group of service servers which offer low level service among the service servers at normal time and dynamically shift service servers among the plurality of groups and render a service as a service quality of a group to which the shift is made; and

reducing a load on a service server within any of the plurality of groups by using at least one service server with the lightest load within the intermediate server group as the service server within any of the plurality of groups, when the load on the service server within any of the plurality of groups increases, and a quality level to be rendered by any of the plurality of groups cannot be maintained, and the service server of the intermediate server group returns to a low level when the load on the service server within any of the plurality of groups decreases after the increase of the load, wherein the service request with a high service level requirement is preferentially processed while still processing service requests of a low service level requirement.

These features of claim 1 are not found in Choquier and Goldszmidt. Further, Goldszmidt does not disclose or suggest that the service servers are categorized in a plurality of groups. Therefore, a combination of Choquier and Goldszmidt is not proper to reject claim 1. It is respectfully submitted that the present invention is patentably distinguished from a combination of Choquier and Goldszmidt. Reconsideration and withdrawal of the rejections are respectfully requested.

Claim 6 recites, in part,

managing the plurality of service servers by dividing the service servers to define a plurality of groups of service servers depending on quality levels of rendered services, and an intermediate server group of service servers which offer low level service among the service servers at normal time and dynamically shift service servers among the plurality of groups and render a service as a service quality of a group to which the shift is made; and

reducing a load on a service server within any of the plurality of groups by using at least one service server within the intermediate server group as the service server within any of

the plurality of groups, when the load on the service server within any of the plurality of groups increases, and a quality level to be rendered by any of the plurality of groups cannot be maintained, and the service server of the intermediate server group returns to a low level when the load on the service server within any of the plurality of groups decreases after the increase of the load, wherein the service request with a high service level requirement is preferentially processed while still processing service requests of a low service level requirement.

The applicant cannot find these features in Choquire and Goldszmidt, either alone or in combination. Allowance of claim 6 is requested.

Claim 7 recites, in part,

managing the plurality of service servers by dividing the service servers to define a plurality of groups of service servers depending on quality levels of rendered services, and an intermediate server group of service servers which offer low level service among the service servers at normal time and dynamically shift service servers among the plurality of groups and render a service as a service quality of a group to which the shift is made; and

reducing a load on a service server within any of the plurality of groups by using at least one service server within the intermediate server group as the service server within any of the plurality of groups, when the load on the service server within any of the plurality of groups increases, and a quality level to be rendered by any of the plurality of groups cannot be maintained, and the service server of the intermediate server group returns to a low level when the load on the service server within any of the plurality of groups decreases after the increase of the load, wherein the service request with a high service level requirement is preferentially processed while still processing service requests of a low service level requirement.

The applicant cannot find these features in Choquire and Goldszmidt, either alone or in combination. Allowance of claim 7 is requested.

Claim 8 recites, in part,

managing the plurality of service servers by dividing the service servers to define a plurality of groups of service servers depending on quality levels of rendered services, and an intermediate server group of service servers which offer low level service among the service servers at normal time and dynamically shift service servers among the plurality of groups and render a service as a service quality of a group to which the shift is made; and

reducing a load on a service server within any of the plurality of groups by using at least one service server within the intermediate server group as the service server within any of the plurality of groups, when the load on the service server within any of the plurality of groups increases, and a quality level to be rendered by any of the plurality of groups cannot be maintained, and the service server of the intermediate server group returns to a low level when the load on the service server within any of the plurality of groups decreases after the increase of the load, wherein the service request with a high service level requirement is preferentially processed while still processing service requests of a low service level requirement.

The applicant cannot find these features in Choquire and Goldszmidt, either alone or in combination. Allowance of claim 8 is requested.

Claim 9 recites, in part,

a managing unit managing the plurality of service servers by dividing the service servers to define a plurality of groups of service servers depending on quality levels of rendered services, and an intermediate server group of service servers which offer low level service among the service servers at normal time and dynamically shift service servers among the plurality of groups and render a service as a service quality of a group to which the shift is made; and

an intermediate server shifting unit reducing a load on a service server within any of the plurality of groups by using at least one service server with the lightest load within the intermediate server group as the service server within any of the plurality of

groups, when the load on the service server within any of the plurality of groups increases, and a quality level to be rendered by any of the plurality of groups cannot be maintained, and the service server of the intermediate server group returns to a low level when the load on the service server within any of the plurality of groups decreases after the increase of the load, wherein the service request with a high service level requirement is preferentially processed while still processing service requests of a low service level requirement.

The applicant cannot find these features in Choquire and Goldszmidt, either alone or in combination. Allowance of claim 9 is requested.

Claim 10 recites, in part,

service servers grouped according to quality levels of the services provided, including a group of intermediate service servers offering low level service at a normal time, wherein a service request with a high service level requirement is preferentially processed while still processing service requests of a low service level requirement and wherein an intermediate group server is assigned to one of the quality level groups when the one of the quality level groups cannot maintain a group service level because of an increased load and is reassigned to the intermediate group for performing low level service when the load decreases.

The applicant cannot find these features in Choquire and Goldszmidt, either alone or in combination. Allowance of claim 10 is requested.

Claim 13 recites, in part:

"dividing the servers into groups of servers based on service level requirements of an application group, a group of mid-level servers alternatively used for lower priority applications and higher level applications as needed; and

dynamically transferring a server of the mid-level group with the lowest load to a group of servers with a highest service level requirement requiring additional throughput while maintaining a minimum throughput to a lower priority applications, and returning the service server of the mid-level server group returns

to a low level when the load on the service server within any of the plurality of groups decreases after the increase of the load."

These are not found in Choquire and Goldszmidt.

The other claims are, directly or indirectly, dependent from independent claims above. Therefore, the other claims are also patentable. Reconsideration and withdrawal of rejections are respectfully requested.

## **CONCLUSION**

It is believed that the present Amendment is responsive to each of the points raised by the Examiner in the Office Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,  
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